THE TEACHER.

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"YES, I recollect; I did promise to tell you, my dear R., when you came again, about my visit to Rugby.

"It is a quaint old town, — this Rugby of hallowed memory, with its narrow streets, flanked with low-roofed houses of yellow brick and shops of stone without grace or ornament; looking, too, for all the world, like a little old woman with a plain, sweet face, and here and there a ruffle or a curl, — but terribly out of fashion. The town itself is belted around with broad expanses of meadows and fields, covered with one of those beautiful carpets, of green and velvet make, which nature has spread here in these beautiful isles. The railway station, as at Oxford, is situated on the verge of the village. A mile away is the school, with its long-stretching sides, standing guard at the upper end of the principal street. In the coach which took me from the station was a pale-faced boy, hardly in his teens, with steeple hat and standing collar. The dress, at first, would have raised a smile, had he not turned his large dark eyes full upon me. Out of them came a gaze sad and thoughtful enough for a man. And my mind went back many years to another boy, with 'large blue eyes and light fair hair,' who subdued, so the story runs, the rough and reckless Tom, and brought him, at length, to his knees in prayer.

"'Was it the holidays?' Yes, and although this circumstance prevented my seeing the school at work, it gave the gentlemanly usher an opportunity to show me more of the interior arrangements of the building than he could had my visit been in term-time.

"My request, as soon as I stepped into the private hall of the building, was: 'Show me everything with which is associated the name of your great teacher.' 'Certainly, sir, with great pleasure,' was the polite reply; and opening a door to his left, he ushered me into the sitting-room. It was large, tastily furnished, and looked out upon a garden (at this time gorgeous with flowers), and acres of play-ground beyond. 'This is the room,' said my attendant, 'where Dr. Arnold dined, and where his boys, when invited, were accustomed to come and take tea with him. And this,' said he, opening a door into an adjoining room, 'was his library where he studied and wrote.' This was also a large room, with study tables and cases of books, looking out upon the same garden and spacious play-grounds. In the sitting-room a table was set, on which were the remnants of a repast. 'Ah,' thought I, 'heart and head happily blended.' Here was something more than a schoolmaster — an educator as well. If there, among his books, his intellect could draw from Roman story sound deductions with which to weave a history of the past, here, around this table, the intuitions of his heart were able to seize upon the affections of his boys, and make — who can tell how much? — the history of the future.

"We passed into the long hall; by the dining-room, with its long table, and plainly furnished, where the boys of the house eat their meals; past the study-rooms, — unique affairs, small, containing a table and chair, with half a window overlooking the play-ground, for light, —

into the quadrangle. As I stepped into the open space, the dial of a clock to the left attracted my gaze.

"'Is that the clock,' I asked, 'where Tom and East scratched their names, set the hands forward, and got thirty lines of Homer to be committed to memory to pay for it?'

"'The very same,' was the reply.

"We crossed the space to the small chapel where the boys gather for prayers in the morning. The door enters at the side; to the left is a high desk where the master stands, and there is a raised platform on the opposite side, with seats. The floor, however, is perfectly clear, and into the space the boys crowd, and stand while prayers are said.

"From the chapel we passed again into the quadrangle, then up a narrow stairway to the class-room of the Sixth form. This was Dr. Arnold's room, — the old Number Nine of Andover. It was not a very large room, but high, with a gallery on one side at least, containing shelves of books. The desks of the master and the boys were little square tables simply, — very much in size and shape like the work-tables which our grandmothers used in olden times. Dr. Arnold's table is here, and on it, in silver, is inscribed the length of his service and the appreciation of his worth. Of course I sat down in the same chair in which he sat, and leaned on this same plain square table on which he leaned, during his fourteen years of devoted work.

"'What passed through my mind?' I do not know. This I know, however: the room was full of fragrant memories, — memories of that great mind, which, breaking away from custom and religious bigotry, had taught as no other had ever taught, loved and controlled as no other ever had, the boys under his charge. 'If he should

turn out ill,' he said once of a boy whom he especially loved, and there were tears in his eyes as he spoke, 'I think it would break my heart.'

"And I recollect his biographer says: 'His whole method was founded on the principle of awakening the intellect of the individual boy.'"

"True; and how acceptable it would be if more of our teachers leavened their work with a little of the same principle. Growth is from within, — not from without. The truly educated man is self-educated. The grist that goes from the mill is quite another thing from the corn in the hopper. The mental food that we give the boy must undergo a thorough process of digestion, and be crystallized into thought and deed, before it is of much worth. That, the teacher cannot do; he can simply aid and direct the action and the development. That was the philosophy of Dr. Arnold. It underlies the effort of every true teacher.

"Why, what would you think if I should tell you that this boy here at his books came home this afternoon, with two or three pages of Rhetoric to be committed to memory, word for word; and that, because I shall not allow him to swallow the indigestible mass whole, he will receive certain black marks upon his record to-morrow? But let that pass.

"From Arnold's class-room I descended to the large chapel. The sun had set, and the shadows of evening were gathering. I stood above his grave, hat in hand, thrilled with an emotion which I cannot quite describe. I had reached the Mecca of my boyish love, the grave of this great and holy man.

"Sleep, sweet spirit! till the great Awakening. Pardon — here, Walter, put a shovelful of coal upon the fire — the tear, dear Reader."

THE FREDERICK WILLIAM GYMNASIUM AND THE BOSTON LATIN SCHOOL.[1]

THE higher or secondary schools of Prussia are, speaking generally, classed as Gymnasia and Real Schools. The principle on which the curriculua of these two classes of schools are framed, is the same, namely, that of giving the mind a thorough training and cultivation. But the Gymnasium leads to the university, and is designed to prepare boys for university studies; while the Real School does not take into account any particular subsequent course of study, but aims to afford a good general education to boys who are not intended for the university. They differ, therefore, in their courses of instruction, the basis of the former being Latin, Greek, and mathematics; in the latter, mathematics, physical sciences, and modern languages. Latin, however, it should be added, forms an important element in Real Schools of the first and even of the second class.

Below the Gymnasia are the Progymnasia, and below the Real Schools are the Higher Burgher Schools. The Progymnasium is simply an inferior Gymnasium, that is, a Gymnasium without the upper classes. In like manner, the Higher Burgher Schools are inferior Real Schools, and in fact are called also Real Schools of the third class.

In small places, where it is not practicable to sustain two High Schools, the Gymnasium and the Real School are united. Such schools are approximately represented with us by the better class of High Schools. The Boston Latin School, as it is now organized, closely resembles a German Gymnasium. I know of no school in New England that answers precisely to a Real School of the first class. The English High School in Boston may be compared to such a school in important particulars; but, on the other hand, it is different in its aim, and in the extent and duration of its course of study.

The studies common to the Gymnasia and the Real Schools

[1] The Schools and Universities of the Continent. By Matthew Arnold. Report on The Frederick William Gymnasium in Berlin, for the year 1868–1869. By the Director, Ranke. Report in School Committee on the High School Education of Boys. Boston, 1870.

are religion, the German, Latin, and French languages, history, geography, mathematics, physics, natural science, writing, drawing, singing, and gymnastics. Indeed, in respect to the subjects of instruction, the two classes of schools differ only in this: Greek is not studied at all in the Real School, while English, to which three or four hours a week are given in the three upper classes, forms no part of the regular work in the Gymnasium. Of course they differ essentially in respect to the degree of prominence given to the several parts of the curriculum.

Boys are not admitted to the sixth or lowest class of a Gymnasium before the age of ten. The qualifications for admission are: A knowledge of reading, writing, the first four rules of arithmetic, and the elements of fractions, European geography, the rudiments of drawing and of elementary geometry, familiarity with Bible stories and the life of Christ. The course of study lasts nine years, and the average age of boys at graduation is about twenty. Of the whole number of gymnasial students in Prussia who completed the full course, from 1856 to 1860 inclusive, 2,851, or very nearly one third, were over twenty years of age. I think the average age of students who enter at Harvard falls a little below eighteen.

Each of the six classes in a Gymnasium is usually divided into an upper and lower section, and each of these sections again into two groups. One year is spent in each of the three lower classes, — the sixth, fifth, and fourth, — and two years in each of the three upper classes; but this rule is not absolute. Ability and industry may carry a boy more rapidly through the lower forms.

Promotion from class to class is made to depend upon proficiency in all the principal studies, and no one is allowed to join a higher class till he has reached that grade of knowledge which the higher class requires.

As the Gymnasium, like all other public and private establishments of education, is under state supervision, its study-plan is fixed, in the most important matters, by ministerial authority. The subjects of instruction have already been given. The time allotted to each study, and generally the order and development of the several subjects, will be understood from a brief analysis

of the annual report of the Frederick William Gymnasium in Berlin for 1868–1869.

The studies of the sixth class are the following: Latin, to which ten hours of recitation a week are given; arithmetic, four hours; German, two hours; natural history, two hours; geography, two hours; religion and writing, each three hours; and drawing, two hours, — in all, twenty-eight hours. The work of the fifth class is the same, except that one hour is deducted from arithmetic; and French, which is now begun, receives three hours. The school time is thus increased to thirty hours a week.

In the fourth class, natural history and writing are discontinued; religion and French lose each one hour; and Greek, now begun, gets six hours. The subjects and hours in the third class do not differ materially from those of the fourth, except that natural history is resumed, and history now has a portion of the time before assigned to geography. Physics and mechanics are added in the second and first classes, receiving together two hours. The time given to Latin is reduced to eight hours in the first class; for all the others it continues to be ten. Greek has six hours a week from the time when it is begun, — at the expiration of a boy's second year in school.

The relative importance of the several studies in this scheme will be more readily seen from a statement of the per cent of the whole time allotted to each. Thus it appears that, —

Latin has	32 per cent.	French has	6 per cent.
Greek "	13 "	Natural Hist.	3 "
Mathematics,	12 "	Writing,	3 "
History and Geog.,	9 "	Drawing,	3 "
Religion,	8 per cent.	Physics,	2 "
German,	7 "		

What strikes one especially, in examining this table, is the great prominence given to Latin over all the other studies, and the very low place occupied by the natural sciences, German, French, natural history, and physics. Writing and drawing receive together less than three fourths as much time as is given to Latin alone. But even this statement does not adequately express the enormous preponderance of Latin. I have given the

hours of recitation. But several of the studies named require little or no preparation out of school, while the Latin lessons would demand on the average not less than two hours of previous study. Latin, therefore, instead of taking thirty-two per cent, probably consumes not less than forty per cent of a boy's entire time of study and recitation. There can be no doubt that the knowledge of the Latin language (and also of the Greek) acquired by boys who complete the course in a Gymnasium, is very remarkable. No senior of Yale or Harvard could pass the examination required of a gymnasial graduate as a condition of receiving a certificate that he is qualified for university studies. Lest this should seem an incredible assertion, I will state briefly what the character of that examination is in the classics. The examinee is expected to be able to translate and explain *at sight* passages of Latin and Greek which are new to him. He must next translate a piece of German, dictated on the spot, into Latin; another piece, similarly dictated, into Greek. Finally, he must write an original Latin essay in a given number of hours. It should be added that all the questions and answers in the *viva voce* part of the examination must be in Latin.

I say there can be no doubt of the breadth and thoroughness of the classical knowledge which the Gymnasium gives. But we may doubt the wisdom of devoting more than half of the golden years from ten to twenty to the acquisition of Latin and Greek, remembering that the question is not of preparation for any particular calling in which a profound knowledge of those languages is requisite, since the Gymnasium wisely refuses to take any account of a boy's future vocation.

I have already said that the Boston Latin School very closely resembles a German Gymnasium. But this statement is correct only in view of important changes very recently introduced in the organization of that school. Briefly, those changes include a great enlargement of the course of study, the partial adoption of the departmental system of instruction, an increase in the number of teachers, a raising of the standard of admission, and a modification of the methods of instruction. The school has been merely an appendage to Harvard College, and its course of study nearly limited to the subjects of the Harvard entrance examination.

Its aim now is "to give a thorough general culture to boys intending to pursue the higher branches of learning, or preparing for professional life." Thus the school is entering upon a new era in its history. It proposes to itself a higher and more difficult task. It is trying an experiment of great moment to the cause of secondary education in this country, and this, I trust, will excuse or justify a detailed examination of its plan of work. In respect to the subjects of instruction, the order of their development, and the distribution of the school hours, the Latin School programme agrees in the main with that of the Frederick William Gymnasium which has been described. The only important variations in the studies are, the omission from the Latin School curriculum of religion and mineralogy, and the addition of chemistry and astronomy. In respect to the succession of studies, only two points require remark. Algebra is begun in the lowest class in the Latin School; in the Frederick William Gymnasium, not till the fourth year. There is a corresponding difference in the time at which botany and geology are taken up in the two schools.

As to the amount of work, there appears to be no great difference. The design would seem to be to carry the boys in the Latin School quite as far forward in all the main studies, as in the Gymnasium. For example, in the latter the course in mathematics ends with plane trigonometry and analytical geometry; in the former, with spherical trigonometry and higher algebra. The number of Latin and Greek authors from whom selections are to be read is considerably greater in the Latin School than is usual in the Frederick William Gymnasium, if the annual report which has been examined may be taken as representing the custom in that institution. I find that the Latin authors read in all the classes in the school year ending in 1869, were Nepos, Cæsar, Livy, Cicero, Virgil, Sallust, Tacitus, and Horace. It is proposed to read in the Latin School the same authors, and in addition selections from Phaedrus, Justin, Quintus Curtius, Ovid, Lucretius, Terence, Plautus, and Quintilian; that is, eight authors in the one, sixteen in the other.

W. C. C.

[*Concluded in the next.*]

CHEMISTRY AS A STUDY.

MUCH has been said and written upon the value of the study of the ancient languages, for promoting the discipline of the mind, but it is a question whether the *natural sciences* do not present advantages equally good in this respect. If properly taught, their study gives, in addition, the most valuable practical information in regard to common things, explains phenomena of daily occurrence, while the knowledge so acquired may be applied to new and original investigations in the same or in a different direction.

Among the natural sciences particularly adapted to these purposes, none presents greater advantages than the science of chemistry.

The simple elementary principles which lie at its foundation, make it an easy study for the young. The constant variety of the facts presented, the singular and in many cases wonderful character of the various chemical changes considered, and the pleasure derived from seeing these changes produced, fix the attention, and maintain the interest in the study by all classes of students.

The value of the facts presented, the constant applications of a knowledge of these facts to useful purposes, in short, the practical every-day knowledge acquired, all make chemistry as a study second only in importance to the cardinal branches, — reading, writing, and arithmetic.

A further consideration in regard to the importance of chemistry as a study is, that it is a subject calculated to train not only the mind, but the hands, to habits of precision, regularity, and order.

A writer on this subject remarks, that "it teaches the doctrine that accurate and extensive observation is necessary for the accumulation of facts; that careful and exact comparison is necessary for the reduction of these facts to general statements; that logical precision is necessary in estimating the relative value of various problematical statements on points where positive information is wanting; that consequently the chemist must study to become capable of judging according to *circumstantial* evidence on all

subjects where positive information is wanting, and in that manner habituate himself to the formation of sound opinions on all subjects that come under his cognizance. If any one will consider the great value of a sound judgment in the ordinary affairs of life, he cannot but appreciate the strength of this argument in favor of such an education."

Such being the importance of the study, the question arises, How should chemistry be studied?

This question will be considered in future numbers of the "Teacher."

READING.

I KNOW NOT WHERE OR HOW.

I KNOW not where the lost on earth,
By mystery of a heavenly birth,
  May have their dwelling-place;
I only feel that still, somewhere,
Around us, or in depths of air,
  They live in God's embrace.

I know not how they hear or see
What may be said or done by me
  Within this earthly sphere;
I only feel that kindness shown
To those on earth they called their own,
  Is sure to bring them near.

I know not how the love which here
Made heaven of earth when they were near,
  Survives in worlds unseen;
I only feel it cannot die,
Where'er its home, in earth or sky,
  'T is living, ever green.

I know not, when I gently press
A daughter's lips, yet feel them less
  Than hers who gave her birth,
If the fond mother lingers near,
Mid scenes by sacred memories dear,
  Lured by the loves of earth.

I know not how my little Frank's
Disjointed prattle, infant pranks,
That thrill my soul with joy,
Are shared by her, upon whose breast
His mother lay, and found her rest, —
The grandma of my boy.

Yet here I rest, disprove who will, —
The logic of the heart is still
My trust, and not the brain.
I know not where, I ask not how,
But to the conscious presence bow,
And heaven will make it plain.

CAMBRIDGE.

ARITHMETIC FROM A RADICAL POINT OF VIEW.[1]

I THINK arithmetic is studied a great deal too much, — and then again, in quite another sense, it is not studied half enough. I would have it studied a great deal less and a great deal better. We are all of course agreed that it is an essential branch of school study, but *why* is it? The answer to that question will bring us to the root of the difficulty; and the answer is in two parts, — first, that the study is good as a mental discipline; and, secondly, that the knowledge of it is indispensable as a preparation for practical life. These are the two tests to every part of our course of school study: How far is any and every study a good mental discipline? How far is any and every study practically useful? Now no study is good as mental discipline, which is studied *too much*, to the exclusion of other kinds of discipline. No study is good which is studied at the wrong time, or by wrong methods. I think that arithmetic in our *elementary* schools is studied too much, to the exclusion of other necessary kinds of mental discipline, which more properly belong there. I think it is studied at wrong times, and by wrong methods; and is thus open to all three of the possible methods of objection; and hence, as taught

[1] Extract from a Speech at an Educational Convention.

in our schools, is shorn of half its value, both as a mental discipline and as a preparation for practical life. The only way by which I can justify these charges, is by contrasting the position of arithmetic in the course of study at present pursued, with its position in the course of study in public schools, which I think the times require.

The philosophy of education has not yet made much progress among us, but I think it may be said that a few fundamental principles of the highest importance are gaining a general recognition ; and the leading one is this, that there is such a thing as a true *order* of studies, an order corresponding to the development of the mental faculties, and which must be followed if those faculties are to be developed in a healthy and symmetrical way. It is true that an inductive science of psychology must have made far greater progress than it has yet made, before all the questions relating to this true order can be settled ; and when teachers shall begin to look upon their work as a calling based upon scientific principles, we shall, perhaps, have that body of observations collected from the actual experience of practical teachers, which is as essential to the progress of the art of education, as are the observations of the naturalist or the astronomer in their pursuits. In the absence of those observations, much school-work is worse than thrown away; for, as a right method develops, so a wrong method distorts the growing mind; but I think we are beginning to see the outline of the course to be followed by popular education as it has never been seen before. This outline and course is the thing which is violently poohpoohed by the thorough-going conservative. I venture to predict that it will be here, and might even forecast his arguments ; for he would have us look back to the old stage-coach, district-school, endowed-academy wisdom, and mistrusts all modern, newfangled railroad, and particularly air-balloon projects. But who knows but air-balloons may not be the next thing? Railroads have on the whole proved safer, as well as swifter, than stage-coaches, — spite of accidents that have sometimes happened to our conservative friends.

Now, sir, in the inauguration of this more philosophical course of study in our public schools,—which, I am happy to say, I think

spite of conservative opposition, is gradually, but successfully, taking place, but perhaps more rapidly in the new schools of our younger Western States, where a young and energetic population, untrammelled by many hide-bound prejudices which hamper us, after adopting all that is good in our methods, are seeking everywhere to improve on them, — there is one very bitter pill which our conservative friends have got to swallow, and that is modern physical science. They make all sorts of wry faces at it. They call it godless, atheistic, and I know not what bad names. Or else they say that they took it long ago, and that old President This, and Doctor That, of Sleepy Hollow Academy, taught physical science quite as much as was good for people, long before the radicals were born, and point triumphantly to their old air-pump made in the year one. I saw the telescope the other day, and the newly appointed master of Sleepy Hollow Academy asked a visitor whether he thought it was a reflecting or a refracting telescope. He was just appointed, and had not learned.

I concede the point, Mr. President. They did have physical science in those days. The air-pump and the questionable telescope are good evidence. But here is the point which bears upon our present question of the study of arithmetic, — they did n't have physical science in the primary school, nor in the district, nor in the grammar school. They saved it all, such as it was, for the fortunate scholars of Sleepy Hollow Academy. Physical science in the primary school! that is the proposition that excites the wrath of the conservative, — godless and atheistic physical science, broke loose from the conservative care of sound and judicious academic principals, who knew how to administer the poison in safe doses, and with proper antidotes, and running riot, like a cattle plague, through all our grammar schools ; that is an idea they find it hard to be reconciled to. The only safe things for primary and district schools are the time-honored primer and spelling-book, Murray's good old orthodox grammar and *arithmetic ;* Daboll's or Pike's would be better, but they will tolerate Greenleaf. The venerable Mr. G., whom we all remember, was born early, and lived to a great age among us, and was, as we all know, a safe and conservative man.

And yet nothing is more certain than that one of the two

pivots on which the whole question of educational reform and educational progress hinges, is this very so-called godless and atheistic physical science; for, godless though it may be called by conservatives, yet we have discovered — so we radicals claim — that the Creator in his wisdom has so planned and ordered the world in which we live, that the study of that world — that is to say, physical and natural science — was intended to form a main and leading part in the training of the youthful mind, main and leading element *from the very outset*, from the very primary school itself, in a true order of studies. And this, sir, is what, — to keep close to my present subject, — is what utterly condemns our present methods of teaching arithmetic, because that method presumes that the whole of physical science is to be reserved for Sleepy Hollow Academy, and that the only wholesome occupation for the youthful mind, in primary and grammar school, is the reckoning up of page upon page of barrels of sugar and hogsheads of molasses, — varied, to be sure, with the spelling of a very large number of columns of strange and unfamiliar words, and a suitable amount of application to the worthy Murray's pronouns and participles.

We radicals maintain that the progress of educational philosophy has forever abolished that theory of elementary education, and that the old pattern of arithmetics must go with it, clean out of all modern grammar and primary schools that really meet the demands of these new times, which as yet hardly any do. And that is where we join issue with the conservative, and where we are ready to criticise severely our present system of primary and grammar school instruction. I am ready to say, sir, that until our primary and grammar schools learn this lesson, they will not be worth the money spent on them, or worthy of the noble buildings in which so many of them are kept. Our school methods are far behind our school architecture.

Let me say here, that in making these strictures, I am far from intending them as a censure on my fellow-teachers. I know very well from experience how completely the best-intentioned teacher may be hampered by the requisitions of an established system, how little of a free agent he is, even in regard to most important and necessary changes. He undertakes his

work under conditions, makes himself one wheel in a machine, which he, as an individual, is powerless to alter. This, however, makes it the more incumbent on him to make himself heard as a member of his profession, and to be ready to entertain and discuss all questions of reform in professional meetings. By these he can, if he pleases, make himself felt by the public.

If my task here were to discuss the question of a general reform in our school course of study, I should have much to say of a change which I consider of even more consequence than the reduction of the amount, and the change in the method, of teaching arithmetic, to make way for natural and physical science. And that is a change from the absurd and fruitless and untimely study of grammar, over to a rational and fruitful and valuable mastery of language, — and by language, so far as primary and grammar schools are concerned, I mean of course the English language. Our children get little or no mastery of their mother tongue, and no knowledge of its literature ; and the reason is, — grammar. I hope, sir, that the time will come when all the primary and grammar school grammars — their name is legion, each worse than the other — will be reduced, so far as children are concerned, to a simple little tract of, say, twenty pages, and then there will be some prospect that our children will both learn good English, and acquire in school a real love of reading good literature ; and, in view of dime novels and yellow-covered magazines, I think that would be the most blessed change that we can imagine. For though I value physical science, and am glad to see that it is coming into possession of the rights of which it has so long been deprived, yet I do not overvalue it. The main instrument in educational training will always be found, after all, to be, not physical, but metaphysical. Literature is as much above science as mind is above matter. Physics in the end merge into metaphysics for all but the materialist and the atheist ; and of materialistic physical philosophers, however they may seem to flourish for the moment, I have not the fear evinced by some of our conservatives. It is a poor compliment to pay to religious truth to suppose it at the mercy of Auguste Comte, though the errors of antiquated sectarian theologies *are* at the mercy of any one who has the courage to challenge them.

But God does not contradict himself; and the religion of the future will take up into itself all the new truth which science is revealing, and be fixed the more, and not the less immovably, in men's hearts for every one of its revelations. But I say this, by the way, and speak of that subject — a very important one — only so far as is necessary to explain my position in regard to the arithmetic. And to return to the arithmetic, I have these propositions to present to the consideration of my fellow-teachers, as questions of vital importance in the consideration of the question of popular education, points which they have got to discuss and consider, as I think, on pain of being abolished themselves, — for the world is moving very rapidly, if schools do not.

The points are these, —

1st. Should not the systematic observation of outward things be made one main and not a subordinate part of primary teaching, and should not the teaching of language and of numbers also, in this primary stage, be mainly carried on *through* this study of outward things, so that the child in this stage — when sense, perceptions, and imagination are strong, and reflection undeveloped — may be taught the full exercise of his senses, and lay a solid foundation for words in a knowledge of the things words stand for, both literally and symbolically, both as the element of prose and of poetry? And should not this occupation of the child's mind exclude all of abstract arithmetic beyond a little counting and adding, and so on, of *real* objects, so that a foundation for future abstract arithmetical reasoning may be firmly and gradually laid in intuition of number as connected with material things? And how far is this theory of primary instruction consistent with the operations, I will not say of a good Kindergarten, or of the Boston Training School, or the Westfield or Framingham training classes, but with the ordinary routine of the great mass of our public primary schools?

2d. Are our grammar schools, or are they not, places where the majority of the pupils are children of working people, destined themselves to work hard with head or hands, or both, for their own living and the good of their fellows? And if they are, is a grammar school a place where it is worth while to give them as good and useful a preparation for the life they are to lead afterwards as is any way

possible; or is it a place where they are to learn, under plea of training their minds, a parcel of useless abstractions, hated while they are learned, and forgotten as soon as school is over? And which of these functions do our grammar schools, taken as a whole, come nearest to fulfilling now? And in regard to the use which they do serve, is the following a Utopian or a practicable scheme for their improvement, particularly as regards the study of arithmetic?

Taking the children, trained as I have been imagining, in the primary schools, and altering the entrance examination to the grammar school in conformity, — for pedantic entrance examinations are one of the curses of all our schools, from grammar school up to Harvard College, — would it, or would it not, be possible to begin with intuitions of form even in the lowest classes, and to carry on the study of arithmetic so slowly and philosophically as to give room for the mastery of plane geometry along with it, not *after* it, which is the usual method? I warn my conservative friends that I am going to be very Utopian, — but then, am I not a radical? Is n't that the true way? Are not ideas of form, which are the subject of geometry, even easier to children, than ideas of number, which are the subject of arithmetic?

And in the next place, could or could not even grammar and district school teachers take the children out into the yard, and show them how the pump worked, and various other similar phenomena? In other words, could they, by carefully avoiding long Latin words, teach them the rudiments of physics almost without their knowing it? And further, what between the practical applications of geometry in the shape of the good old-fashioned mensuration, and the calculations needed in the mastery of their elementary physics, and of all the questions which their modern geographies furnish, could we not afford to dispense with a good many of Greenleaf's hogsheads of molasses? and arithmetic, by being made practically useful at every step, and combined in a natural and philosophical manner with the r udiments of other scientific studies, be made absolutely interesting to the pupil to a degree far beyond the sweetening power of all Father Greenleaf's molasses hogsheads? And could there,

or not, by this combination of studies, wisely planned and carefully carried out, be a vast saving of time accomplished in our grammar and district schools? And would not the farmers and the blacksmiths and carpenters think better of grammar schools, and not worse, if, instead of a half-mastered knowledge of the whole abstract theory of numbers, they found their boys possessed of a less extensive but more thorough knowledge, — learned through actual application and use, in the course of acquiring a considerable amount of practical knowledge of those sciences on which their life-work depends, a knowledge, namely, of the properties of matter, and the laws that govern the phenomena of the world in which they live? I think myself that the acquiring of this knowledge should be begun in the primary school, and carefully followed up in the grammar school, so that the young carpenter or the young blacksmith who graduates from the grammar school, and never sees the inside of a high school, should begin his apprenticeship with a body of useful knowledge, that should make him apt in learning his trade, and useful while he learns it. I think this could be accomplished in the primary and grammar school, and that the arithmetic, far from suffering, would be learned better.

I have spoken chiefly of boys. I should like, if time allowed, to speak of the curtailment of the study of arithmetic by girls, and what I would substitute; and the improvement in their education that would follow, as the result of a wise economizing of time, and a careful and true organization of studies. I may be enthusiastic, but while much labor and money are expended on costly high schools, I do not think that the educating capacity of our primary and grammar schools has begun as yet to be developed; and as the bulk of our children must always leave school at an early age, I consider the development of the capacities of primary and grammar schools a matter that quite takes precedence of the high school. "Take care of the pennies," said Franklin, "the pounds will take care of themselves." Take care of elementary training, and as sure as that is *well* attended to, so surely will good high schools and colleges follow.

The subject of the right organization of our course of study is one that cannot be exhausted in a single paper, or in many

papers. It is the problem of all others that is now pressing for solution. My present object will have been attained, if I shall have furnished material for a profitable discussion between those who agree and those who differ from me.

W. P. A.

READING.

It is well known, at least to teachers, that there are various theories of teaching reading to very young children. The old method, still adhered to by many, is to begin with the *name* of the letters, and then jump to the *power* of letters in combination; and we sometimes think it very strange that the child can't see that "h-a-t" spells "hat," when, in fact, he has no reason in the world to think it spells anything, or, at most, only "aitch-a-ty." But, bad as this system, or lack of system, is, children do learn to read, though not by any *direct* instruction. This is the child's first experience in school of "obtaining knowledge under difficulties," and furnishes an excellent illustration of his aptness to learn, and his ability to overcome, partially, the hinderances of poor teaching.

Another method is that of beginning with the powers, or elementary sounds, before the names of the letters are given, and combining them, thus forming words.

Still a third method is that of beginning with the *word* as the unit of significance, and analyzing the spoken word into its elementary sounds, and the written word into letters. While I am aware that many excellent teachers advocate the second method, it seems to me that the third is more in accordance with the manner of learning to talk, and appeals more immediately to the intellect.

It must, I think, be easier and more interesting to take a word, the sign of an idea, and resolve it into its parts, than to work with the utterly unmeaning elementary sounds until we have constructed the significant sign. It seems to me that the machinist finds it a more interesting as well as easier process, having seen the machine as a whole, to take it apart and examine it,

than he would to construct the several parts, and put them together without any idea what it is to be till it is finished. But whether teachers begin with one or the other of the two latter methods, their work soon becomes essentially the same. They both differ from the first in being intelligent methods, which the first is not. But this is only the first step in learning to read, and it has seemed to me that the next step — that of putting words together in phrases and sentences — is quite as important, and perhaps more so. The monotonous habits acquired by reading sentences, before the pupil is perfectly familiar with the words and phrases, are often carried through life.

There are certain words, as the articles and the auxiliary verbs, for instance, that stand in the relation of unaccented syllables to the words to which they belong; and I think the sentence should not be read till the pupil can pronounce these combinations as one word. Thus, I would have the pupil able to pronounce rapidly the phrases, "can spin," "the boy," "the top," before he is required to read the sentence, "The boy can spin the top." It then conveys to his mind some meaning, instead of being a mere string of words, as they are, if, with some difficulty and silent spelling of the words, he reads, "The — boy — can — spin — the — top."

B. F. Tweed.

HOW TO PUNISH.[1]

There is great advantage in adapting the character of the punishment to that of the fault, — making it, as far as possible, the natural and proper consequence of it. For instance, if the boys of a school do not come in promptly at the close of the twenty minutes' recess, but waste five minutes by their dilatoriness in obeying the summons of the bell, and the teacher keeps them for *five minutes beyond the usual hour of dismissal*, to make up for the lost time, the punishment may be felt by them to be deserved, and it may have a good effect in diminishing the evil it is intended to remedy; but it will probably excite a consid-

[1] From "Gentle Measures in the Management of the Young."

erable degree of mental irritation, if not of resentment, on the part of the children, which will diminish the good effect, or is, at any rate, an evil which is to be avoided if possible.

If now, on the other hand, he assigns precisely the same penalty in another form, the whole of the good effect may be secured without the evil. Suppose he addresses the boys just before they are to go out at the next recess, as follows: —

"I think, boys, that twenty minutes is about the right length of time for the recess, all told, — that is, from the time you go out, to the time when you are *all* back in your seats again, quiet and ready to resume your studies. I found yesterday that it took five minutes for you all to come in, — that is, that it was five minutes from the time the bell was rung before all were in their seats; and to-day I shall ring the bell after *fifteen* minutes, so as to give you time to come in. If I find to-day that it takes ten minutes, then I will give you more time to come in to-morrow, by ringing the bell after you have been out *ten* minutes.

"I am sorry to have you lose so much of your recess, and if you can make the time for coming in shorter, then, of course, your recess can be longer. I should not wonder if, after a few trials, you should find that you could all come in and get into your places in *one* minute; and if so, I shall be very glad, for then you can have an uninterrupted recess of *nineteen* minutes, which will be a great gain."

Every one who has had any considerable experience in the management of boys will readily understand how different the effect of this measure will be from that of the other, while yet the penalty is in both cases precisely the same, — namely, the loss, for the boys, of five minutes of their play. — *Jacob Abbott.*

SAMUEL H. TAYLOR, LL. D.

THE following extracts concerning the life and character of the late Dr. Taylor of Andover, are taken from advance sheets of the forthcoming number of the "Congregational Quarterly," by the leave and courtesy of its editors. It is a very interesting as well as appreciative paper, by an intimate friend and neighbor of the great and lamented teacher.

Dr. Taylor's ideal of education was a high one. His familiar saying was: "Education is not so much knowledge, as a preparation for knowledge." It is the formation of the mental habits; it is the discipline of the moral feelings; it is the acquisition of intellectual and moral power. It ought to be superintended by men who know the avenues to the human mind and heart; men who combine with a quick insight of the human character, an earnest desire to form that character aright. Hence, he regarded it as a great evil that so much of the instruction given in our colleges is given by young men who are not themselves thoroughly disciplined, and who connect with the business of giving instruction in one department the business of receiving instruction in another; the labors of a pupil in a law or theological school with the labors of a teacher in the classical or mathematical school. He mourned over the fact that so many subordinate teachers in the academy were not well furnished for their work; and he deemed it important that there should be a seminary for the training of classical instructors. He has sometimes been thought whimsical in the high estimate which he put on regularity of habit; the duty of observing stated hours for rising to work and retiring to rest, for repasts and study. It was not merely for his students, during their novitiate, that he insisted on the regular study hours; but he reasoned thus: Unless a scholar observe these hours in the academy, he will not in the college; and unless he observe them in the college, he will not in the professional school; and unless he observe them in the professional school, he will not in his professional life; he will never be a student. He was wont to say, that in a majority of instances, a boy who remained irregular in Phillips Academy, continued remiss and vagrant through his entire subsequent course; and those who reformed their habits in later years confessed their error in not forming them well at the academy. In disciplining the boy, he was looking forward to the man. Few teachers have been so provident as he for the future of their pupils.

It has sometimes been asked why he rushed forward with so great celerity in his recitations, plying his scholars with rapid questions, and demanding rapid answers. He desired to culti-

vate the habit of concentrating the attention on one object. His pupils, during their study hours, must give themselves wholly to their work; must prepare themselves for a ready solution of all difficulties; must foresee the questions and forecast the answers, familiarizing themselves with different forms of statement, and guarding their minds against the possibility of confusion. Therefore, if a pupil while in the recitation-room did not pay constant heed to the business before him, the question would fall suddenly on his ear, and not being answered at once would fly to another. If unprepared, he had no time then to deliberate or repent; he must speak, or a more attentive pupil would speak for him. Thus he became alert and energetic. Many a lawyer, while examining witnesses before a jury, has thanked the master of "Number Nine" for giving him a grapnel by which he could hold firm and fast the materials then and there to be examined.

As the aim of Dr. Taylor was to discipline the mind, to sharpen the faculties, to cultivate the power of logical and independent thought, of exact, precise, neat expression, he made his recitation-room an intellectual gymnasium. It is interesting to read the reminiscences which his pupils have written of the scenes in that room. The following is a summary of them as given by different individuals.[1]

The Principal enters "Number Nine." He summons Munroe to read the first sentence. Munroe makes a gross mistake in pronunciation "*Sufficient; next, Smith,*" resounds the voice of the principal. But Smith had been inattentive; and being surprised, hesitates in finding the place. "*Next, Brown,*" comes the imperative word. Brown translates the first line, and then follow the interrogatories in quick succession, and the answers must spring forth as rapidly as the questions. "*Dicam?*" says the principal. "It is" (begins the pupil — but he is suddenly arrested by the exclamation: "*It is — that is superfluous: say where it is made*"). — "Indicative mood, future tense, active voice, first person of *dico, dicere, dixi, dictum.*" While question and reply, like a weaver's shuttle, are passing swiftly between teacher and pupil, the vigilant eye detects a student, who, instead of attending to the lesson, is arranging himself for a half-recumbent position on the settee: "*Pause here,*" cries the heavy voice of the teacher; "*Robinson, when you have adjusted yourself properly, we will proceed. Next, Jones.*" This man is thoroughly at home; answers rapidly all the questions suggested by the lesson, relating to grammar, history, biography, geography, mythology, logic,

[1] We print but one. — EDITOR OF TEACHER.

rhetoric, poetry, oratory, political economy, morals, religion, etc., etc. "*Next, Wilson.*" This man is indefinite ; gives vague answers. half right and half wrong. "*Have you studied the lesson, sir?*" — "No, sir, I was bothered." — "*Bothered is no word for a student, sir,*" replies the principal, before the vacillating student has time to finish the sentence. "*Next, White*" ; and now comes a recitation peculiar to Phillips Academy, and superior to any which I ever heard in any college or professional school.[1]

The recitation is in Sallust. *Magnificus?* is the single word, uttered in an interrogative tone by the Doctor, who neither uses nor tolerates a superfluous syllable. The student quickly translates it by the English "magnificent." "*Next.*" The second translates it "great." "*Next.*" The third replies, "splendid." "*Next.*" The fourth answers "haughty." The fifth and sixth are equally unsuccessful in selecting the precise term ; and at length, despairing of the right answer, the exact principal utters in the most emphatic tone, suiting the action to the word, and the class will never forget the word, "IM — POS — ING."

It is evident . . . that Dr. Taylor made a deep impression on his pupils. This impression resulted from the unity of his character and life. The great majority of men have no distinctive character. They agree with others, repeat what others say, and neither think for themselves nor have any feeling ot their own. Dr. Taylor had his own thoughts and his own emotions. He was his own man. There was a concinnity between his mind and his body. His person was commanding, and his voice sonorous. The letters of his pupils abound with expressions like these: "I remember the first time I ever saw him" ; "I shall never forget my first impressions of him" ; "I trembled when I was first introduced to him" ; "It was no small thing to stand before his dread presence." His large and robust form, his heavy tread upon the floor, the deep tones in which he uttered his words of admonition, gave him a kind of power which a thin, spare man, with a tenor voice, would not have acquired. It is commonly said that the body is the handmaid of the soul: *his* body was his soul's executive officer. He was a man of clear convictions and of decided will ; he therefore expressed his thoughts and feelings in clean-cut and definite words. One ot his pupils says : "All vague, uncertain, visionary, and vacillating conditions of mind were far removed from him. As I write ot him, I seem to feel that I must be precise, unflinching, bold,

[1] The chief part of the description in this paragraph was suggested by an article in the "Ellsworth American," on Dr. Taylor.

or I shall hear his voice as of old in the recitation-room saying right in the middle of an ugly sentence of Sallust, without a conjunction to cling to: 'You may sit down, sir; you don't understand it.'" With his sound sense he combined a quenchless enthusiasm in study. His prudence was not fossil wood, and his enthusiasm was not wild-fire. His pupils trusted his judgment, and caught so much the more readily his interest in the classics. Like begets like; life produces life; fire kindles fire. A man's scholars are not made enthusiastic by authority nor by reasoning alone; they are sympathetic; they are enlivened by the life, are enkindled by the heat of their teacher. Many of Dr. Taylor's pupils inhaled the breath of his own inspiration. Scores of them have said, "I never knew how to study until I went into 'Number Nine';" "He was the most exciting teacher whom I ever heard"; "I owe my power of application chiefly to him." One of them says, "It has been remarked of students in college who had been fitted at Andover, that they seemed often to go through the Latin and Greek of the freshman class from the sheer momentum imparted to them in the last year [Dr. Taylor's year] of the preparatory course." He was a man of regular industry. Every morning at six o'clock he was at his study table; every evening before ten o'clock he had left his books, in order to gain vigor from sleep for the toils of the next day. Hence, he had stored his mind with such an amount of knowledge, and accumulated such a degree of power, as astonished his pupils.

The tributes of reverence and love which they (his pupils) paid him at the time of his death were numerous and heartfelt. The alumni of Phillips Academy who were then members of Amherst College, united in saying: "To each of us Dr. Taylor has been more than an earnest and faithful instructor. A year's intercourse in the class-room has endeared him as a friend, whose affectionate interest in our welfare will cause his memory to be cherished more deeply as the years shall increase our gratitude" for his services in our behalf. The alumni who were then members of Yale College united in expressing "gratitude and affection" for their "dearly cherished and honored instructor," and said:

"We mourn the loss of one who endeared himself to us all by his eminent virtues, unflinching integrity, and his true Christian example." From a parish in Iowa, an excellent pastor wrote: "At the annual examination of Phillips Academy, Dr. Taylor's face beamed with delight, as one after another of us rose, and in our answers to his close questioning, did full credit to his instructions. I have had twenty-five teachers since that time, but none to whom I owe so much as to him. And now he is gone, — who will take his place in the hearts of his thousands of pupils?" From a distant town, the mother of one of his pupils wrote: "Was he not the teacher of my two sons, the youngest of whom has 'fallen on sleep'? Was he not also their father's teacher? Was not his name a household word with us, — a synonyme for all that was true and right and noble? At the instant when I first heard of his death, my uprising thought was: '*My darling son has met his teacher; they are together now; how glad my son will be to see him! How will the Phillips band that have passed the river rally around him!*' Three weeks before the death of my son, he handed me his little Testament, and said, with feeling, 'Take good care of that. I read out of it every day, while at Andover, at morning prayers at school; and there are Dr. Taylor's notes and remarks on the margin, taken fresh from his lips.'" — *Edwards A. Park, D. D.*

A MATHEMATICIAN or a speculative philosopher may be more profound, but the naturalist is more discursive and various. I have noted, too, that he generally retains the freshness and buoyancy of spirit incident to youth more perfectly than those devoted to the abstruser branches of science. No doubt the study of nature is healthier than the study of books, for the mind as well as the body. I can scarcely help detesting your bookworm. He is almost invariably an intellectual prig, as vain of his knowledge of what other men have thought and said, as if he had himself originated all that he can quote. I never see one of these methodical, plodding blockheads at work in his library, with his *index rerum* and scrap-books, inflated with the conceit

of authorship on the strength of some dull, laborious compilation, but I am tempted to wish that all the libraries of the world had shared the fate of that of Alexandria. — *Overland.*

STUDY AND HEALTH.

Devotion to intellectual pursuits and to studies, even of the most severe and unremitting character, is not incompatible with extreme longevity, terminated by a serene and unclouded sunset. Dr. Johnson composed his "Dictionary" in seven years. And during that time he wrote also the "Prologue to the opening of Drury Lane Theatre," the "Vanity of Human Wishes," the tragedy of "Irene," and the "Rambler," — an almost incomprehensible effort of mind. He lived to the age of seventy-five. When Fontenelle's brilliant career had terminated, and he was asked if he felt pain, he replied, "I feel only a difficulty of existing."

Mental application is a powerful remedy in diseases both of body and mind; and its power as a remedy is proportionate to its intensity as a pursuit.

The turmoils of active life do not appear to render intellectual labor more injurious to the system, — possibly here also the influence may be counteracting. Milton, the secretary to the Commonwealth, in times when men lived years in months, — blind, and in domestic discomfort, writing his immortal poems; John Wesley, persecuted, and almost an outcast from his former friends, in "labors abundant," denying himself natural rest and refreshment, yet acting in mind and body with unparalleled energy; Voltaire, the apostle of infidelity, at war with more than the whole world, — these and a cloud of others warred with the existing order of things, and remained masters of themselves and their mental powers to a ripe old age.

The injurious effects of mental labor are, in a great measure, due, —

To excessive forcing in early youth;

To sudden or misdirected study;

To the co-operation of depressing emotions or passions;

To the neglect of the ordinary rules of hygiene;

To the neglect of the hints of the body ; or,

To the presence of the seeds of disease, degeneration, and decay in the system.

The man of healthy phlegmatic or choleric temperament is less likely to be injured by application than one of the sanguine or melancholic type ; yet these latter, with allowance for the original constitution, may be capable of vast efforts.

The extended and deep culture of the mind exerts a directly conservative influence upon the body.

Fellow-laborer, one word to you. Fear not to do manfully the work for which your gifts qualify you ; but do it as one who must give an account of both soul and body. Work, and work hard, whilst it is day ; the night cometh soon enough, — do not hasten it. Use your faculties, — use them to the utmost, but do not abuse them. Make not the mortal do the work of the immortal. The body has its claims. It is a good servant ; treat it well, and it will do your work. But task it and pine it and suffocate it ; make it a slave instead of a servant ; it may not complain much, but, like the weary camel in the desert, it will lie down and die. — *Charles Elam, in "Physicians' Problems."*

TOPICS.

"My duty, my duty," were the watchwords through life of the late Dr. Taylor of Andover. So says Prof. Park, his eminent friend. It brings to our mind a scene which occurred just a dozen years ago. It was in the doctor's study. A naughty boy was before him. We remember it distinctly ; and that boy was listening to a criticism on his course of conduct during the winter which had just melted away. The doctor, first in kindly tones, complimented him upon his ability, — then added, "You have dropped more than fifty per cent in your studies, during the past two or three months." The boy was conscious of it, but sought to defend himself by saying that he was forced to act as he had done. The reply of the great teacher is fresh in his memory to-day ; and this it is exactly : "I do not doubt that you were *influenced* to act as you did ; but a man is never *forced* to act contrary to his duty." That naughty boy, grown to manhood, has never for-

gotten the distinction between influence and force in the performance of one's duty.

THE latest invented institution for the rearing of families is the *Familisterre.* It consists of a block of buildings, containing many families,— all eating at the same tables, and the children all cared for and trained in the same nursery. It is a Paris conception, of course. One would think that fifty children, under a half or third as many nurses, all in the same room, with the bump of destructiveness just in the ripe stage of development, would be anything but the beautiful creatures they are when fondled alone and by themselves. Yet Paris says it is the very best way of training and developing them. Their social instincts keen, they get a kind of growth, it is asserted, superior, and which cannot be got when they are isolated. We are inclined to think the Frenchman has an idea worthy of a thought. Is it not generally true that the boys of large families grow up better developed than those of small? Is it not true, especially in this age of hurry and cram, that the boy gets an aliment for his growth from his schoolmates with whom he associates, which is essential, and is not given him by his teachers? We believe in unseen influences, and so we believe in large schools and large classes. The class rather than the teacher is the crucible that tries the boy, and develops the golden in his intellect and character.

THE Governor's address is a noble production, — manly and terse ; and if one can see the moral and intellectual traits of an author in the dress with which he clothes his thoughts, the remarks of the Governor give evidence that to-day a *man* sits in the great chair of the Commonwealth. In his message he touches many important questions concerning education ; the most interesting thing said is in the special plea which he makes for technical education. He says that heretofore it has been "almost wholly neglected" ; but thinks we cannot longer safely put aside any means "calculated to give the labor of coming generations high proficiency." It is true. We want no more rotten bridges, no more bursting boilers, no more houses built upon the sand. Knowledge, knowledge, is what we want. Skilled labor! Let us write it upon the brow of every industry of the State. Let us get back to our good old English blood, if it does run slowly. *Festina lente.* He who builds slowly, builds surely.

THE first prosecution under the English compulsory school law occurred last month at Liverpool. A father was fined one shilling, with two shillings and sixpence costs, and promised to send his boy to school in the future. The London "School Board Chronicle," commenting on this fact, says: "It is not very long since it was contended, by warm controversialists on the education question, that to compel people to send their children to school, and to inflict penalties in default, would be, practically, an impossible and a ridiculous thing in this free country." We quote this objection to the law, because we have heard the same objection urged against extending the time of school attendance in our State compulsory law, and making such provisions as shall secure obedience to its commands on the part of parents. England carries without opposition the first and strongest barricade of objections. Massachusetts, when the time comes, will do the same. We are sorry the Governor did not allude to this important question, now agitating educational circles, in his recent address. Why he did not, we do not know. We trust, however, that the Secretary of the Board of Education will see that it is brought to the attention of the present Legislature.

BUSINESS.

WE have received many flattering compliments from different sources regarding our new suit, and its intrinsic worth; and we would tell some of them, were we not so modest and quiet-mannered. We thank our friends for their honest, hearty words, however; and we assure our dear Reader, as he drops in from month to month, that he shall always find us clad in the same modest, elegant attire, greeting him with the same generous welcome, and chatting with him, we trust, always on subjects of interest and value.

WE have heard this objection: that the name of the Editor does not appear upon the cover; that, consequently, the journal is irresponsible. We do not think that the inference is logically made. But let this be said: First, that the magazine will be conducted on an independent and liberal basis. No paper sent to the Editor will be rejected, if of proper length, appropriate, and of sufficient interest and ability. Each author will be responsible for his own sentiments.

Secondly, the journal will discuss, with whatever ability it may be able, questions of immediate interest. Its opinions will be stated frankly and fearlessly. The teachers of the State have but to say the word, and give us the earnest of their desire, and before the year is gone, they will be convinced that there is a concentrated editorial essence somewhere behind the throne. Pardon our boast. Consider it not a boast,— only the expression of earnest feeling. Give us, teachers of the State, of your means,— and it need be but little,— give us of your brains, and the organ of your Association can have no rival between the two seas.

CHARLESTOWN, thus far, has the palm. Out of 131 teachers, she sends in 70 subscribers, and the list is not yet closed. This result has been accomplished by the concerted action of the masters of the different schools. Cannot every city and the larger towns do the same? With the same ratio, Boston should give us at least 446 subscribers; Cambridge, 79; Worcester, 76; Lowell, 59; Springfield, 52; Fall River, 47; Lynn, 46; New Bedford, 44; Salem, 42; Lawrence, 36; Taunton, 35; Somerville, 31; Chelsea, 30; Haverhill, 29; and Newburyport, 26. These with the 70 from the city of Charlestown would make, in the aggregate, nearly 1,200 subscribers,— *from the cities only*. Shall we not have them? The superintendents, masters, and teachers can successfully answer the question, if they will.

ALL communications should hereafter be addressed to "The Teacher," Globe Theatre Building, 366 Washington Street, Boston (Room 18).

WE call the reader's attention to the advertisement of Estelle's programme clock. It is a novel timepiece, but warranted durable, and easily kept in order. To those who, from choice, or the arrangement of their rooms, desire a fixed programme of time, it will prove an excellent aid in the general management of the school-room.

Notes by the Way.

Mrs. Celia Burleigh thinks one of the rights of children is, to be taught obedience. Mark the idea! *taught* obedience as a *right.* Sic omnes dicimus. . . . Illinois mothers knock faithful teachers down with curling irons; at least one mother did. *He* apologized for being knocked down, — said he was n't very well. . . . Wesleyan University had a Boston festival and the small-pox last December. . . . The earliest mention of a school-house in Watertown, in the town records, is September 17, 1649; and on the 2d of November, John Sherman was appointed to build it twenty-two feet long, fourteen feet wide, and nine feet high between the joists. . . . Now that the humbug of State college scholarship, given to furnish educated teachers to the State, is done away with, can nothing be done to require our Normal School pupils to keep their pledges and actually become teachers after graduation? . . . The patron saint of school-boys is Saint Nicholas, who restored four boys to life after they had been cut up and salted down by a wicked innkeeper. . . . Condur-angu, not Condurango, so says "Appleton's Journal." It means Condor vine, and Condor ought to be Cundur. Yet it *is* Condor; so let it alone. . . . Under Catherine II of Russia, a Princess was President of the Academy of Sciences. Under Catherine Beecher a woman ought to be President of an Academy of Domestic Science. Speed the day! . . . Darwin's attention is called to a New Zealand monkey, which is nursing a human infant. The monkey who calls his attention to it as proving anything, ought also to tell him how a wolf suckled Romulus and Remus. . . . Dr. Dean knew how to appreciate the teacher's work, — as witness his legacies to the faithful former teachers of Dean Academy. . . . The best chemist in Iowa Agricultural College is a girl. The best Greek scholar in Michigan University is a woman, and the best in mathematics is of the same kind. . . . It is proposed to send missionaries from the West to Amherst. It needs 'em. . . . Ashburnham had in 1854 $200,000 left for an academy. The bequest stipulates for two institutions not less than a quarter of a mile apart, one for girls and the other for boys. The trustees, however, by advice, are to build but one, and admit both sexes. Good! . . . Cornell University has a friend who will build it a boarding-house if it will admit women. It could n't do better than accept. . . . Little Rhody had her Teachers' Conven-

tion last month. Of course it was a success. . . . Nashua = Nash-u-way, — so says the New York Historical Society. Gnash away, we shall still say Nash-u-a. . . . Worthy honors, — those paid to Miss Cushman by naming the school built on the site of her birthplace, in Boston, after her. She honors Boston, Boston should honor her, seems to have been the pleasant logic. . . . January 6, 1650, the committee of Watertown hired Richard Norcross to teach school for one year, for 30£., and allowed him 2s. a head for keeping the "dryherd." From this it appears that milking was not a qualification for the schoolmaster. . . . The musical jubilee for which Boston is now preparing is to be held in a building 832 feet long and 422 feet wide, — 2⅓ times as large as that of 1869. Hail, heavenly maid! . . . The entire population of the United States is 38,923,210, distributed, as to color, as follows: white, 33,589,857; colored, 4,886,387; Chinese, 63,254; and Indians, 383,712. Of these latter, some two thirds are estimated as "nomadic." . . . The northern part of Dakota Territory, extending south to the 46th parallel, is to be set off to form a new territory by the name of Ojibway. Dakota and Ojibway Territories will make two States, each with nearly as great an area as that of Minnesota. . . . Mrs. Colt, the widow of the inventor of Colt's revolver, is building a $60,000 school-house, in which to educate the children of her workmen. A noble lady! . . . The Assembly of the Province of Rio de Janeiro has passed a law making it obligatory on parents and guardians to send their children to school, between the ages of seven and fourteen. . . . Iron in Glasgow costs $15 a ton. In this country it costs $30. So much for protection. . . . $80,000,000 of gold and silver is annually produced upon the Pacific coast. . . . The pyramids are about to be utilized by being made stations for weather observations. . . . "The civilized world," says Lippincott, "seems to be passing through an era of ring examination." Would it be too bad to wish that it may prove a wring examination before it is finished? . . . Chas. Dickens, speaking of his early life, says, that though famous and caressed, he often forgot in his dreams that he had a dear wife and children, and wandered desolately back to his boyhood. So childhood is often tortured by the ignorance or meanness of the parent. . . . Some one speaking of the coming woman managing her own yacht at sea, likens the occasional fillip of salt water in her face to "Neptune tossing his kiss to Juno." . . . Dr. Nicolls, a celebrated English physician, says that the foot-and-mouth disease of cattle is the same as the scarlet fever in the human subject. So he proposes to save children from this dread

disease by vaccination. If true, a joyful discovery! . . . Ruskin's idea of education is, that "Boys should learn to ride or to sail; the girls to spin, weave, and sew, and at a proper age to cook all ordinary food exquisitely: the youth of both sexes to be disciplined daily in the strictest practice of vocal music: and for morality, to be taught gentleness to all brute creatures, finished courtesy to each other, to speak truth with rigid care, and to obey orders with the precision of slaves." . . . Milan has eighty churches. . . . Worth knowing: Parton says that the "intermingling, by marriage, of families long cultured, with families more vigorous and less refined," gave us Shakespeare and Goethe. . . . Holmes says that "the way Mother Earth treats a boy shapes out a kind of natural theology for him." . . . The "Maine Journal" says, "There ought to be State pride enough in the breast of every teacher in Maine, to do something towards supporting our own organ." "Ditto," says "The Teacher." . . . The Persians have a "Passion Play." May it not be the original of that at Ammergau? . . . In the German universities, the proportion of the professors to the students is that of 1 to 9 nearly, in Oxford 1 to 47¼. . . . The first wedding ever celebrated in the New-England colonies, took place May 12, 1621. . . . Germany don't like Tilton's biography of Victoria Woodhull, and has prohibited its sale. . . . Rev. Mr. Hepworth goes over to Orthodoxy, and Darwin, the great scientist, swings to the opposite pole, and embraces the Free Religion of Mr. Abbot. . . . A due proportion of salt, eaten regularly every day, in connection with all articles of albuminous food, meat, flour, etc., will render the body invulnerable to small-pox, — so says "Good Health." . . . Darwin's next effort will be to prove that "dogs and monkeys can laugh, smile, sneer, look cross, or throw a deep pathos into their speaking countenances." . . . There are 300,000 children in Paris, between the ages of seven and thirteen, who go to no school, but are plunged in the grossest ignorance. . . . Progress! — The cannibals of the Fegee Islands now support a newspaper. . . . The old Manassas battle-field was sold a few days since for eight dollars an acre. . . . In Denmark an arrangement is made by which children may attend school one part of the day and work the other part. A school-house — in Copenhagen, for example — is furnished for a thousand children; one session is held in the morning, a thousand attending; in the afternoon a second thousand children attend, — both schools being under the same general management. . . . It is a common fallacy in regard to diet that brain-workers need less nutriment than muscle-workers. The changes of

tissue in the brain, that take place during study and thought, are very important and very rapid, and must be replaced by abundant food. . . . Statistics show that there has been very little snow on Christmas for the last twenty years. . . . Bayne, the essayist, says of the Prince of Wales, that his redeeming points are "undisputed good temper and energetic zeal in the autumn manœuvres. These," says he, "have loomed with unusual impressiveness through the dusky atmosphere of the sick-room." "This is the first time," says the "Tribune," "we ever heard of zeal for manœuvres looming through a dusky atmosphere." . . . There are 236,846 volumes in the Library of Congress. . . . Fifteen thousand trees are ordered for the Bois de Bologne, which begins to resume its former aspect. Oaks, elms, and platanes, all less than fifteen years old, are being transplanted with great care from Fontainebleau. . . . Hackett, the actor, just dead, was educated at an academy in Jamaica and in Columbia College. He was a Bohemian, loving the stage and literature. . . . The Poet at the Breakfast Table regards "Bub" as an abbreviation of Beelzebub, as "bus" is the short form for "omnibus." This is evidently a mistake. It is the short form for "hubbub," as "sis" is for "crisis." We wonder that a fellow so near the Hub should make such a mistake. Query: Was he tired when he said it?

INTELLIGENCE.

— THIS winter another attempt is to be made to take the control of public schools out of the hands of the States, and put them in the charge of officers acting under the authority of Congress. Congressman Stewart, of Nevada, is the author of this new scheme, to carry out which he has framed and offered in the House the following amendments to the Constitution of the United States.

SECTION 1. There shall be maintained in each State or Territory a system of free common schools, but neither the United States, State, Territory, nor Municipal Corporation shall aid in the support of any school wherein the peculiar tenets of any denomination shall be taught.

SEC. 2. Congress shall have power to enforce this article by appropriate legislation.

They were referred to the Committee on Judiciary. Should they be adopted, and finally become a part of the Constitution, Congress would have power, under the second section, to wipe out all Boards of Education acting under State laws, and to transfer their powers to the Bureau of Education at Washington.

— WHEREAS, a year ago there were no municipal schools in Rome, there are now 14 daily schools, comprising 44 masters, 14 assistants, and 2,304 pupils. There are also 8 evening schools, with 1,536 pupils. — The National Teachers'

Association will hold its next annual meeting in this city, and the American Institute of Instruction, in Lewiston, Me. The meetings will be held in the latter part of August. — The number of persons in the District of Columbia between the ages of six and seventeen years, is 31,671, of whom 10,494 are colored. The total of public school accommodation is for only 11,836, thus leaving 19,836, nearly two thirds, unprovided for. This is a discreditable condition of things, and shows Congress has been shamefully derelict in its duty to the people of the District. The District is no longer governed by Congress exclusively. An act granting to the people self-government was approved a year ago. The Governor, Hon. Henry D. Cooke, has set himself vigorously to work to raise money to be applied to the development and maintenance of a school system which shall be worthy of the nation's capital. — The annual volume of the National Teachers' Association for 1870, contains the addresses and proceedings of the Cleveland meeting. It is a valuable book. It can be obtained of James H. Holmes, Washington, D. C., in paper, $1.00 ; bound in cloth, $1.25, postage paid.

— TOTAL expenses of the city of Boston for education, in 1860, $628,549.28 ; in 1870, $1,575,279.07. Total number of scholars in 1860, 26,488 ; in 1870, 36,174. Salaries of teachers in 1860, $286,835.93 ; in 1870, $816,344.66. Rate per scholar, exclusive of the cost of school-houses : in 1860, $15.03 ; in 1870, $30.82. — Movements are making to further urge on Congress the establishment of an American college in China, as recommended by Presidents Buchanan and Lincoln. — Charlestown expends $78,617.50 for schools per year. The first school was established in 1636 ; the first High School, in 1671 ; the first Industrial School, in 1712. — Miss Charlotte Cushman has furnished Madame and Miss Kriege funds necessary to train a class of Kindergarten teachers. — The trustees of the Hunter's Point School have served on the principal a notification that the public school buildings shall be closed, unless the reading of the Bible is discontinued. The Board of Commissioners deny the right of the trustees to interfere in any way, either with the school discipline or property, and have notified the principal to take no notice of the notification of the trustees. The principal continues the reading of the Bible as usual. — Sidney J. Morse, the author of the famous "Morse Geography," died in New York, Dec. 15, at the ripe old age of seventy-eight years. He was a brother of Prof. Samuel F. B. Morse, the inventor of the electric telegraph, and a graduate of Yale in 1805.

— UNIVERSITIES. Vermont University is the first college in that State to admit women. — Nassau College has 400 female students. — Harvard undergraduates number 619. Whole number of students in the University, 1,106. — Tufts College numbers 98. It has received by will of Mrs. Joseph J. Whiting, of Hingham, $3,000. Dr. Oliver Dean left to the same $80,000, and as much more to Dean Academy. — The strict requirements of the Harvard Medical School has reduced the number of students from 301 in 1870–71, to 196 in 1871–72. — The Wesleyan University held their annual festival last month. There was some discussion on the subject of the recent admission of women. Judge Pitman and Rev. Mark Trafton disliked the change. The President and Rev. Gilbert Haven were in hearty accord with the movement. — Middlebury College, Vt., has 7 professors and 49 students. — Amherst College has 244 students, 21 professors and tutors. — Washington and Lee University, Va., has 289 students. At a recent meeting of the Board of Trustees, a summer school was organized to sit during the vacation of the University. The intention is, to allow students to

make up deficiencies without loss of time during the regular course. Another object is to provide for the instruction of school-teachers, in order to advance the grade of public school teaching in the Southern States. — Miss J. F. Ripley has gained the highest prize for Greek scholarship in the university of Missouri. — The class in Chinese at Cornell University is constantly increasing in size and interest. It is proposed to add a chair of Asiatic Languages. There are no Chinese in the University of California. — The Regents of the Iowa University have appointed two women on their examining committee for the ensuing year: Mrs. Ellen A. Rich, in mathematics, and Miss Mary Johnson, in the normal department.

— THE annual income from the Peabody Educational Fund is $120,000, of which $110,000 is disbursed, and $10,000 held for extraordinary emergencies. As soon as all the bonds belonging to the fund become available, the annual interest will amount to about $175,000. The people of the South appreciate the great benefaction of Mr. Peabody, and exhibit that appreciation by strengthening themselves as rapidly as possible. Quite a number of towns maintain their schools now without extraneous aid. Dr. Sears has made an excellent impression everywhere in the South. No gentleman is more cordially received or more freely honored.

— THERE are now in the United States 34 institutions for deaf-mutes, with nearly 4,000 pupils, and over 200 teachers. The one at Kendal Green, near the city of Washington, D. C., supported mainly by appropriations from Congress, has 4 professors, with 50 students. The course is the same as in all of our respectable colleges. Two classes have graduated thus far, and their 9 graduates are now receiving an average of over $1,100 a year each, some in the departments, some in the coast survey, one as tutor, and others in teaching. The means of communication between teachers and pupils are the sign language, and the manual alphabet. Articulation is, however, taught to those who desire it, and who give promise of ability to profit by such instruction. Several of the present undergraduates will be able to deliver their commencement orations *viva voce*. Still it is felt that for the deaf-mute the fingers must in great degree replace the tongue, the eye supply the defects of the ear. — Chicago pays her teachers according to their efficiency, making no distinction in regard to sex. — New Hampshire, Michigan, California, and Texas have compulsory education. — The Vermont State Normal School at Randolph Centre, Edward Conant, principal, numbers about 100 students, and is in a flourishing condition. — The State Normal School at Bridgewater, A. G. Boyden, A. M., principal, has in attendance 32 gentlemen and 107 ladies; total, 139. The assistants are, George H. Martin, Francis H. Kirmayer, Barrett B. Bussell, Eliza B. Woodward, Mary H. Leonard, Clara A. Ames, and Mary A. Currier.

— ON the last Saturday of last December, Worcester dedicated their new High School-house with fitting ceremonies. The building is designed to accommodate 500 pupils, and contains 9 school-rooms, each about 30 feet square, 3 of which are on the principal floor, and 6 in the second story. The first story also contains a large room for library and a lecture-room, connected with which on one side is a chemical laboratory, fitted up with all of the appliances for the practical study of chemistry, and on the other a room for philosophical apparatus. The building is finished with varnished pine throughout. The exterior walls are of pressed brick with Nova Scotia stone trimmings, and black bricks are introduced as a feature of decoration. It has a beautiful tower, containing one of Howard's large clocks, which is connected with twelve smaller ones, in as many different rooms, by a battery; thus uniform-

ity of time will be secured throughout the building. It is heated by steam. The total cost, including lot, is $169,691.82. During the coming season, the grounds will be completed, which will bring out the whole arrangement so as to present one of the finest buildings of this kind in the country, — a monument of the public spirit of the citizens of Worcester.

— At a regular meeting of the Springfield Teachers' Association, the following officers were chosen: President, E. A. Hubbard; Vice-President, S. F. Chester; Secretary, Emily Parsons; Executive Committee, J. D. Stratton, Lizzie S. Yeaton, Ellen M. Day, Helen I. Allen, Clara J. Loomis; Reader, Mary A. Bodurtha. Miss Parsons, principal of the Training School, conducted a very interesting exercise in reading. — The governor of "Little Rhody" says, "Better wages should be paid teachers. A uniformity of text-books should be required all over the State." — The trustees of Vassar College have refused to receive two re-respectable young men who applied for admission. — The Province of Quebec pensioned, in 1869, 170 teachers. In Sweden, teachers are pensioned. In Norway, a small piece of land is set apart for the schoolmaster to cultivate, and if necessary, a dwelling-house is provided. — 10,000 children lost seats in school by the Chicago fire, and 112 teachers were thrown out of employment. — Mr. R. T. Greiner, the first colored graduate of Harvard, has been appointed principal of the Institute of Colored Youth, in Philadelphia, to succeed Prof. Carto, who was assassinated last election day.

— Philadelphia has 1,539 teachers, and 81,854 pupils. She expended for school purposes last year, $1,491,629.58. — "Thou Shalt not Steal" was the suggestive text from which Rev. Dr. Peabody preached his election sermon before the "assembled wisdom" of our State last month. — Prof. W. H. Niles, the distinguished lecturer on physical geography, has decided to spend next summer among the Alps. — Mr. Dodge, of Salem, succeeded Mr. Williams (who entered the ministry a year ago) as sub-master of the Salem High School. — Mr. Colcord, of Danvers, becomes principal of the Tapleyville Grammar School. — Miss Giles takes the place of Miss Merrill, as assistant in the Danvers High School. Miss Merrill succeeds Miss Mudge, who resigned to enter upon domestic duties. — Mr. W. F. Marston, Hallowell, Me., is elected sub-master of the Somerville High School. — John W. Allard, Dover, N. H., High School, has resigned, and the school is closed. — Miss Merrill and Miss Wilkins are chosen to take charge of the Centre and Wallis new Primary Schools, Peabody. — W. W. Spaulding is principal of the High School in Adams. — Salem Normal School, D. B. Hagar, principal, has 158 pupils in attendance, 12 of whom are in the advanced class. — Dummer Academy has 60 students. — Lawrence Academy, Groton, has 108 students; principal, James Fletcher, assisted by Thomas E. Eaton, A. M., Miss Mary A. Davis, Prof. Ware, and Mrs. S. F. Cooker. — Miss E. A. Stowell and Miss E. J. French have been appointed assistants in the Washington Grammar School, Cambridge; also Mrs. R. D. Pratt in the Thorndike, vice Miss Clara Bartlett, resigned.

— The Horticultural School for Women at Newton Centre. In view of the small number of women who wish to enter as students into an institution devoted entirely to such pursuits, and the opening of a similar school on the Bussey Place in Jamaica Plain, and believing that two such schools could not be needed in the same vicinity, the directors decided to close this school. Meantime, though their school is closed, their existence as a corporation is not. They are ready to dispense the funds in their hands for the aid of women who wish to make horticulture their profession. The Bussey Institution of Harvard College has 4 women.

— H. R. WARREN, of New Bedford, has been elected principal of the High School, Dover, N. H., in place of J. W. Allard, who succeeds E. H. Davis as superintendent of the schools of Nashua, N. H. — Addie Reed, assistant in the Abington Centre High School, has resigned to accept a position in the Centre Grammar School, Malden. — Eli S. Sanderson, of Bridgewater, takes a Grammar School in Littleton, Mass. — Mrs. Woods succeeds Abbie M. Hinckley in the Centre Grammar School, Reading.— Want of health obliged Wm. H. Crocker to resign his position as master of Centre Grammar School, Randolph. — Miss Buffum, of Chelsea, succeeds Sarah E. Pratt in Green St. Intermediate School, Melrose.

— BOSTON SCHOOLS. — *Free Evening Drawing Schools.* Walter Smith, principal; C. S. Ward, C. Willis Damon, William Foster, J. L. Frisbe, and Phineas Bates, Jr., assistants at the Institute of Technology; Charles Furneaux, principal; Frank B. Morse and C. F. Stone, assistants, Appleton Street; Bradford H. Locke, an assistant, Mason Street [some account of these schools will be given in the next number]. — *Ordered in School Committee*, That the Board be requested to ask the Legislature so to amend the city charter that this committee may have the selection of sites, and the approval of plans for new buildings. — *Teachers Confirmed.* Judith P. Meader, Clara T. Fisher, Elizabeth A. Fiske, Harriet M. Frazer, Mary W. Perry, Mary A. C. Williams, Abba E. Boutelle, Mary S. Sprague, and Mary V. Woodman. — Geo. H. Howison, master in the English High School, has received an appointmnt in the Institute of Technology.

— STATE BOARD OF EDUCATION. At the recent annual meeting of the Board, Hon. Joseph White was re-elected secretary, and Abner J. Phipps, Esq., agent. Rev. Dr. Jackson, who was appointed by Secretary Sears in 1849, "Clerk of the Secretary, and Assistant Librarian of the State Library," continues to hold the position without annual re-appointment. Hon. David H. Mason, after fourteen years' most efficient service as a member of the Board, has recently resigned, in consequence of his pressing duties as United States District Attorney. Rev. Phillips Brooks, of Trinity Church, Boston, has been appointed by the Governor and Council to fill the vacancy thus caused, and will be associated with Rev. Dr. Miner as a "Visitor" of the State Normal School in Salem.

— STATE NORMAL SCHOOL. The semi-annual examination of the Salem Normal School occurs Tuesday, January 16. The exercises are all public, and the presence of friends of education is gladly welcomed.

— HYDE PARK has recently completed two commodious school-houses, each, containing eight rooms, with a spacious hall. Mr. Geo. M. Fellows continues in charge of the Fairmount School.— The Sunnyside School was recently organized from pupils of the Central, Damon, and Everett Schools. J. Willard Brown, of Milton, takes charge of this school.

— BERKSHIRE ITEMS. Augustus Linfield, principal of the Lenox High School, has received a call to the High School in Indianapolis, Ind., at a salary of $2,000 per annum. — A new school-house is projected at North Adams, to accommodate 400 pupils; another at South Adams for half this number. This town has expended not less than $150,000 upon its school-houses within the past three years; 40 teachers are employed. — Miss E. A. Ladd was recently elected to the position of assistant in the South Adams High School. —Wanted. A missionary in Adams to work in behalf of evening schools; also for five hours' aggregate session. — Miss Graves, a graduate of Vassar College, is principal of Williamstown High School. — Prof. John Bascom is superintendent of Willamstown Schools.

Books.

FIRESIDE SCIENCE. A series of popular scientific essays upon subjects connected with every-day life. By James R. Nichols, A. M., M. D. New York: Hurd & Houghton.

Another one of those excellent books, treating in a popular manner scientific subjects of interest to the people at large. It talks of the "Chemistry of a Hen's Egg"; of a Cigar; of "A pint of Kerosene"; of a "Lump of Sugar." It gives valuable information concerning the clothing we wear, the skin and bathing, concerning diamonds, and the "Lost Arts"; indeed, it touches, either directly or indirectly, many questions about which the unscientific part of the world are constantly asking questions. It would be well if there were many such books on the tables of the public and its teachers.

ILLUSTRATED LIBRARY OF WONDERS. Charles Scribner & Co. We have received this month two volumes of this library: THE WONDERS OF THE VEGETABLE WORLD, and THE WONDERS OF WATER.

"Books that are books." These are not books to be read but once; they should be in every family, and are well calculated to inspire curiosity, and lead to a study of nature in her ordinary forms. The commonness of the phenomena of nature around us makes us insensible to their charms; and these books, by taking some of the most striking, though not most wonderful, operations of the forces of nature, lead us to see that the same creative energies are going on around us, and that the most familiar objects are equally interesting and wonderful when carefully observed by the practised eye.

WORD ANALYSIS. A graded class-book of English Derivative Words, with practical exercises in spelling, analyzing, defining synonymes, and the use of words. By Wm. Swinton, A. M. Ivison, Blakeman, Taylor & Co.

We agree with the author, that "word analysis has not yet the assured and definite place it should by rights have in our ordinary school course." We believe, however, that this book will do much to give it that place. If it does not, it will be because teachers do not know enough of the "real nature of the formative elements and the philosophy of word-building" to appreciate an excellent book.

It is worth half a dozen ordinary spelling-books to teach orthography, for it states and illustrates orthographic principles. It aids also in approaching the definition of words by showing their primary meaning; and furnishes some valuable exercises on synonymes. Wilde & Co., No. 1 Cornhill.

PENS AND TYPES; OR HINTS AND HELPS FOR THOSE WHO WRITE, PRINT, OR READ. By Benj. Drew. Lee & Shepard.

It is not strange that a *proof-reader* should indulge in a little special pleading for the defendant in the case of Pens *versus* Types. We believe that either may often make a good argument against the other. But we are sure that a careful perusal of this book by those who write will do much to fix the responsibility on Types.

WOMAN'S WORTH AND WORTHLESSNESS. By Gail Hamilton. Harper & Brothers.

It is well known that Gail never makes a dull book, and this may create more than a gentle breeze among those of her sex who are interested in Woman Suffrage.

But the book, while, of course, racy, sharp, and piquant, contains an amount of good sense and true womanly feeling, which make it something more than a merely readable book. "Her belief that the only way out of our estate of sin and misery, is the slow growth of individual

excellence, and that it is in the home, in the family, — more sacred than any church, the only divine institution, — that this excellence must be chiefly nurtured," seems to have blinded her to the fact that woman is wholly degraded by being specially assigned to the guardianship of the sanctities of home. For sale by A. Williams & Co.

ROUND THE WORLD; including a residence in Victoria, and a journey by rail across North America. By a Boy. Edited by Samuel Smiles. Harper & Brothers.

This book, written by a boy of sixteen, who went round the world with his eyes open, and who supposed he was telling his story merely to friends at home, will be read with interest and profit by children of all ages.

There is no better exemplification of the fact that "men are but children of a larger growth," than the eagerness with which a good book for children is read by the old folks. This book will go through the family. For sale by A. Williams & Co.

GENTLE MEASURES IN THE MANAGEMENT AND TRAINING OF THE YOUNG. By Jacob Abbott. Harper & Brothers.

There is nothing sentimental about this book. The author believes in parental "authority," — and "punishment," if necessary to secure obedience. But his advice is like that of Hamlet to the players, "to use all gently," and "acquire and beget a temperance that may give it smoothness." It should be read by those who do not *govern* their children, but coax or hire them to do right, and those who govern their children, but not themselves. Those who seek to secure obedience by judicious means will find in it many wise suggestions to aid them. For sale by A. Williams & Co.

BORDER REMINISCENCES. By Randolph B. Marcy, U. S. Army. Harper & Brothers.

This "compilation of random sketches" by one who, during a protracted military career in the far west, was brought in contact with many unique specimens of humanity, is not without interest, and will be read as it was written, "in leisure hours." We confess that the stories do not always seem to us so droll as the author evidently supposed them to be, but they are pleasantly told, and many of them will raise an audible smile. For sale by A. Williams & Co.

THE PARSER'S MANUAL: embracing classified examples in nearly every variety of English construction. By John Williams, A. M. Wilson, Hinkle & Co.

We don't know how much call there may be for a parsing book, at the present time, when grammar finds so little favor as a study in our schools; but for those who still insist on parsing as an important means of learning the use of the language, this manual will be found very convenient.